

Serial No. 10/577,664

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Listing of claims:

1-11. (Cancelled)

12. (Previously Presented) A method for determining a path to convey information from a first radio station to a second radio station via at least one intermediate radio station, the information being conveyed such that the first radio station and each intermediate radio station transfer the information to an adjacent radio station in a direction of the path, from a transferor radio station to a transferee radio station, comprising:

dividing a frequency band into a plurality of subbands for communication between the radio stations, with at least one subband being assigned to each radio station, the frequency band being divided at the radio installation;

determining at least a portion of the path at a radio installation upon request of the first radio station;

transmitting path identification information from the radio installation to the first radio station;

transmitting from the radio installation to one or more intermediate radio station:

- the path identification information,
- Information identifying an other intermediate radio station and information

identifying the subband assigned to it and/or identifying the first radio station and information identifying the subband assigned to it and/or identifying the second radio station and information identifying the subband assigned to it.

13. (Previously Presented) The method according to claim 12, wherein, in addition to the path identification information, the radio installation transmits to the first radio station:

information identifying the transferee radio station for the first radio station, and information identifying the subband assigned to its transferee radio station, and

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the radio installation transmits to each intermediate radio station:
the path identification information,
information identifying the transferee radio station, and
information identifying the subband assigned to the transferee radio station.

14. (Previously Presented) A method according to claim 13, wherein the radio installation transmits to each intermediate radio station:

- information identifying the transferor radio station for the intermediate radio station, and
- information identifying the subband assigned to the transferor radio station.

15. (Previously Presented) A method according to claim 12, wherein,
the radio installation transmits the path identification information to the second radio station.

16. (Previously Presented) A method according to claim 15, wherein the radio installation also transmits to the second radio station:

- information identifying the transferor radio station for the second radio station and
- information identifying the subband assigned to the transferor radio station.

17. (Previously Presented) A method according to claim 12, wherein,
the radio stations of the radio communications system are combined into groups,
each group has a single representative radio station, and
the radio installation only communicates with the representative radio stations in
transmitting the path identification information, the information identifying the radio station and
the information identifying the subband assigned on it.

18. (Previously Presented) A method according to claim 17, wherein in identifying the
transferee radio station and the subband assigned to it:
the radio installation transmits information relating to the transferee radio station.

19. (Previously Presented) A method according to claim 18, wherein in identifying the
radio station and the subband assigned to it:
the radio installation also transmits information relating to the transferor radio station.

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20. (Previously Presented) A method according to claim 17, wherein, at least one representative radio station forwards the path information and/or the information identifying the radio station and/or the information identifying the subband to at least one radio station of its group.

21. (Previously Presented) A method according to claim 12, wherein the radio installation informs at least one radio station of the subband assigned thereto when the radio installation transmits the path identification information.

22. (Previously Presented) A method according to claim 17, wherein each representative radio station is in direct radio contact with all other radio stations of the group.

23. (Previously Presented) The method according to claim 12, wherein the path identification information is a path number.

24. (Previously Presented) A method according to claim 14, wherein, the radio installation transmits the path identification information to the second radio station.

25. (Previously Presented) A method according to claim 24, wherein the radio installation also transmits to the second radio station:

- information identifying the transferor radio station for the second radio station and
- information identifying the subband assigned to the transferor radio station.

26. (Previously Presented) A method according to claim 19, wherein, each representative radio station forwards the path information and/or sends information identifying the transferee radio station and/or sends information identifying the subband to at least one radio station of its group.

27. (Previously Presented) A method according to claim 26, wherein the radio installation informs at least one radio station of the subband assigned thereto when the radio installation transmits the path identification information.

28. (Previously Presented) A radio installation comprising:

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a memory to store neighboring relationships between radio stations of a radio communications system;

means for assigning a subband to each radio station for communication with another radio station, each subband being part of a frequency band divided into a plurality of subbands;

a memory to store information about how the subbands have been assigned to the radio stations;

means for determining at least a portion of a path to convey information from a first radio station to a second radio station via at least one intermediate radio station, the information being conveyed such that the first radio station and each intermediate radio station transfer the information to an adjacent radio station in a direction of the path, from a transferor radio station to a transferee radio station, the path being determined upon receipt of a request;

a transmitter to transmit to an intermediate radio station:

- Information identifying the path,
- Information identifying an other intermediate radio station and information

identifying the subband assigned to it and/or identifying the first radio station and information identifying the subband assigned to it and/or identifying the second radio station and information identifying the subband assigned to it.

29. (Previously Presented) A method to convey information from a first radio station to a radio access point via at least one intermediate radio station, the information being conveyed such that the first radio station and each intermediate radio station transfer the information to an adjacent radio station toward the radio access point, from a transferor radio station to a transferee radio station, comprising:

receiving a request at a base station from the first radio station, to establish a communication path to the radio access point, the base station being part of a radio installation;

generating path information at the radio installation after receiving the request from the first radio station, the path information being generated by assigning at least one intermediate radio station to the path and assigning a frequency sub-band to the at least one intermediate radio station for communication on the path; and

transmitting the path information from the base station to the at least one intermediate radio station.

30. (Previously Presented) The method according to claim 29, wherein information is transmitted on the path only after the path information is transmitted from the base station.